CHOTEAU ACANTHA

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WIND ENERGY DEVELOPMENT HOT TOPIC IN REGION

By Nancy Thornton

Meeting Dec. 11, area residents packed the Lobby Restaurant in Conrad to hear Montana State University Extension Agent Sarah Hamlen present a lecture on wind energy and the opportunities and pitfalls of seeking it to supplement one's income.

It was standing room only as 50 people heard Hamlen say that the program was a timely topic for the area. Wind farms are being proposed in the area and a high voltage power line is being contemplated between Great Falls and Lethbridge, Alta., through Cascade, Teton, Pondera, Toole and Glacier counties.

"I am not an expert, but I have the working vocabulary. This is a very complicated industry," Hamlen said, explaining that she has worked with wind energy "players" for two years and is familiar with the equipment. She discussed net-metering first, then spent some time on the issues that arise when a landowner leases his land to a wind energy company.

She said net-metering for homes and farms is "just running the meter backwards," but she added that rough cost of an installed small turbine is $2,000 per kilowatt.

For rural Montanans who receive electricity from a cooperative, the "true up" period to balance the account is every month. The customer pays the bill after the subtraction of the homeowner's generation (two meters are necessary). The customer does not get paid for any excess energy generation. "This is not about making money," Hamlen said, offering one example that had a 42-year payback.

Montana law allows customers of investor-owned utilities to net meter systems that generate renewable electricity up to 50 kilowatts.

In a follow-up interview, Sun River Electric Cooperative Manager Scott Odegard said all electric cooperatives, which are exempt from the above-mentioned law, have a net-metering policy that limits the net-metering system to 10 kw instead of 50 kw. He said the company's power lines couldn't wheel 50 kw without voltage problems.

"We can do a 10 kw anywhere, we think, 99 percent of the time," Odegard said, but noted that he only has one net-metering customer among thousands of residential accounts.

Concerning the monthly rather than annual true-up, Odegard noted that it is fair because the customer is getting credit for the retail price of electricity as the meter goes backwards. "What other industry does that? It doesn't cost me less to serve that

customer," he said, explaining that the cost of putting in the line to the home and maintaining the system was and is borne by all customers.

"It's like getting soup at full value for an empty can of soup," he said.

Sun River Electric also requires that the system is a safe installation, meeting all codes, and not put together from various wind equipment parts and pieces. Odegard said the bottom line is that wind energy is more expensive that other forms of energy.

At the Dec. 11 meeting, Hamlen discussed how landowners might opt to form cooperatives that build community wind farms or "qualified facilities." The "Minnesota flip" is a platform for investor-owned towers. Farmers make payments over time and then the ownership flips.

"Due diligence is a must," Hamlen said, explaining that small "players" have a difficult time getting wind turbines because developers have claimed new equipment orders into the future. She said one could get deals in used and rebuilt wind equipment, but she cautioned that the owners should have a machine shop nearby.

She said large-scale wind projects have long timelines as the owners determine the impact of wind energy on the rest of the region's grid and as they do studies and seek financing. A typical industry-scale wind turbine costs $4 million, she said. At that point landowners are no longer dealing with people in the renewable energy industry, but dealing with people who are in it for the money, she said.

According to Hamlen, wind energy speculation is high in the state now and some investors want to lock up the best lands for turbine placement. Everything is studied and must fall into place: wind, the site, transmission access, turbines and energy prices.

Developers look at wind maps, site access, environmental concerns and local community attitudes. Year-long wind studies follow once a developer gets control of a site through a lease, and they are followed by engineering projections, an environmental review and economic modeling that estimates projected cash flow.

A federal production tax credit continues to drive the interest in wind, Hamlen said, but that is dependent on Congress to renew as political "winds" change. It provides a $.019 per kilowatt-hour tax credit (adjusted for inflation) for electricity generated in the first 10 years of the life of the project to new projects beginning operation by the end of 2008.

Hamlen urged everyone to consult with a lawyer when contemplating signing a wind lease, an easement or an option. Wind developers might require a 60-acre buffer for a three-acre turbine site. She explained that the landowner should understand what facilities would be built, whether the lease automatically renews and what happens if the wind developer goes broke and the landowner is left with an "monstrosity" on the property.

Wind testing and a feasibility study might take three to 10 years, but a development lease is often 30 to 50 years because the developer wants to build in phases.

Farmers must seek out what impact a wind park would have on one's ability to qualify for farm programs, Hamlen said, adding that "Montana is in the dark ages," when it comes to wind law. What if the company does not pay the taxes, she asked, and added that the laws on "severability" and "partitionment" are unclear, when it comes to whether the landowners are held harmless for problems with the project.

Compensation may be as a lump sum, an annual rental, a royalty or a combination with amounts running from $3,000 to $4,000 for each installed megawatt capacity. Some developers pay the landowners 2 percent to 4 percent of the project's gross revenues.

Factors that influence payments include competition, the value of the resources, one's negotiation skills and the perceived potential profits.

Hamlen said some people are recruiting lease agreements by mail, but she cautioned against working with them.

The extension agent also discussed the constraints on transmission in northcentral Montana calling the current system "antiquated" in that NorthWestern Energy does not have the capacity to wheel the amount of wind energy that is planned here.

"Utilities in Montana are not incentivized for risk. They strive for boring meetings," she quipped, but added that one of the biggest problems with wind energy is that one requires a "firming" source such as hydroelectric or natural gas generators to offset the variability of the wind generation.

NorthWestern buys reserve energy from Washington and Oregon to firm the energy it receives from the Judith Gap wind farm. "It's getting harder to get firming energy. It's a very real problem," she said, meaning that it will cost more in the future.

Hamlen discussed proposed projects that would break the bottleneck of NorthWestern's reduced capacity south of Great Falls, including the Montana Alberta Tie Ltd.'s 230-kilovolt transmission line and the Idaho open season line. She said NorthWestern is going forward with a 500 kv direct-current line, the Northern Lights project, that would be a "superhighway" to Nevada, although the regulatory process involved is time-consuming.

She said northcentral residents have a huge interest in the MATL line but she added that NorthWestern Energy, to which MATL would connect, requires that the wind energy must be firm before it interconnects. "It will be a wind race," she said, for a developer to complete all the requirements.

NorthWestern cannot wheel new energy generation south of Great Falls unless a new 230-kv line is built and two overloaded lines between East Helena and Canyon Ferry

are fitted with a larger conductor size, according to several feasibility studies linked on the company's Web site. NorthWestern estimates the cost to build a new transmission line between Great Falls and Ovando or Townsend at $65.5 million.

State Rep. Llew Jones (R-Conrad) said waves of excitement are being generated around Conrad and Cut Bank as the communities anticipate 500 megawatts of wind energy proposed in Glacier and Toole counties. However, the NorthWestern Energy line has about 106 mw in capacity available, he said, which means downsizing to a smaller project until the MATL line is built that can carry 300 mw. (The line has not obtained approval yet in Alberta and in Montana.)

Jones said Glacier Electric Cooperative operates a line that would wheel energy to connect to the NorthWestern grid. It would be used for the first wind project at McCormick Wind Ranch near Ethridge that is under construction. Jones said that project does not need to connect to the MATL line, although later phases of it would connect.

Jones predicted that MATL would be the company to build the additional line needed from Great Falls to Townsend or Ovando.

"It's an opportunity that is here and will remain here," Jones said, but he warned that Montana has to act fast because only about 15 percent of wind energy generation can be absorbed onto the nation's grid. Other states are building wind parks ahead of Montana, he said.

Landowner Kayla Kitchen of Chouteau County said she was disappointed that the presentation did not include more information for homeowners, as the advertising promotion seemed to indicate. "I thought it was on 'green' homes. They should have split the classes," she said, suggesting that homeowners who want independent systems or net-metering be in one group and the landowners who want to lease their lands to wind developers be in another group.

She said she was very interested in wind energy. "I'd rather see that than coal plants. Mines, you have to clean up. I do not want my children to have to do it. Yes, they provide jobs, but so did Libby," she said, referring to the health-related asbestos problems among workers and their families in Libby.

"At Judith Gap I can still see the mountains, without ash on my car," she said of the 135-mw wind farm at that location.